

1 **50931/PAN/B600 - BP1005-CON3**

ABSTRACT OF THE DISCLOSURE

5 Digital data signals at a variable input frequency are
converted by a numerically controlled oscillator and an
interpolator to a signal at a fixed output sampling frequency.
The conversion of the variable input frequency to the fixed
output sampling frequency may be by a factor other than an
integer. The interpolated digital data signals at the fixed
10 output sampling frequency are then modulated into a pair of
trigonometric signals at a programmable carrier frequency, one
signal having a cosine function and the other signal having a
sine function. The modulated signals at the fixed output
sampling frequency are then combined to create a modulated
15 signal at a carrier frequency determined by the frequency of
the sine and cosine signals. The modulated signal is sampled
at the fixed output sampling frequency and converted to a
corresponding analog signal using a digital-to-analog
converter.

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